

rotomy, are most commonly done in a hospital-based or a freestanding facility.

More ambulatory surgical facilities should be developed and used, whenever appropriate, for other surgical specialties as well as gynecology. When this trend toward most cost-effective surgical care reaches its full potential, it will have a major impact in lowering the overall cost of surgical health care, while preserving its high quality.

PURVIS L. MARTIN, MD

REFERENCE

Martin PL: Ambulatory Gynecologic Surgery. Littleton, Mass, PSG Publishing Company, 1979

The Use of β -Sympathomimetic Drugs for the Inhibition of Premature Labor

ALMOST ALL ORGANS including the uterus have α and β receptors. Stimulation of α receptors causes excitation, while stimulation of the β receptors causes relaxation. The β receptors have been subdivided into β_1 and β_2 receptors: The former are confined to the heart, while the latter are present in the vascular smooth muscle, myometrium and bronchial tree.

Stimulation of β -adrenergic receptors has in recent years become the preferred method to inhibit uterine contractions in premature labor. Pharmacologic agents such as isoxsuprine, ritodrine and terbutaline have been employed clinically and with better success rates than achieved with use of alcohol or sedation.

The maternal cardiovascular side effects of β -sympathomimetic drugs include maternal tachycardia, palpitations, increased cardiac output and hypotension. These side effects vary from one agent to another depending on the degree of β_1 receptor stimulation. Whereas, isoxsuprine stimulates the β_1 and β_2 receptors, the other agents have β_2 selectivity. The maternal metabolic side effects are primarily due to muscle glycogenolysis and lipolysis, and include hyperglycemia, lacticidemia, hyperlipemia, hyperkalemia and increased oxygen consumption. Acid-base balance changes indicate acute metabolic acidosis. Compensatory mechanisms come into force after one to six hours of β -sympathomimetic infusions and the above metabolic changes return toward control levels. β -Sympathomimetic drugs cross the placenta and reach the fetus. There is an increase in fetal heart rate and serum glucose, but no change in the mean arterial pressure and acid-base balance when labor-inhibiting doses are used.

Baumgarten suggested the following treatment

plan: immediate bed rest, sedation if the patient is very anxious and intravenous infusion of β -sympathomimetic drugs. A low dose schedule is initiated, and the infusion rate is increased every 15 minutes until uterine contractions stop. The labor-blocking dose is maintained for 24 hours, then gradually diminished to the minimum effective dose, which is maintained for another 24 hours. If effective, the intravenous infusion is stopped in 48 hours. Oral administration of the β -sympathomimetics is started in the hospital and continued at home until fetal maturity. The prophylactic use of β -sympathomimetics in patients at risk of premature labor has not been proved.

BAHJ S. NUWAYHID, MD

REFERENCES

Caritis SN, Edelman DJ, Mueller-Heubach E: Pharmacologic inhibition of preterm labor. *Am J Obstet Gynecol* 133:557, Mar 1, 1979

Baumgarten K: Results of tocolysis in threatened premature labor. In Bompiani A (Ed): *Recent Advances on Beta-mimetic Drugs in Obstetrics*. Roma, Societa Editrice Universo, 1977, p 71

Hysteroscopy

MOST HYSTEROSCOPIES may be carried out on an outpatient basis utilizing intravenous meperidine sedation and paracervical block anesthesia. The hysteroscopy should be scheduled in the early follicular phase. Hyskon Hysteroscopy Fluid, a 32 percent solution of dextran with an average molecular weight of 70,000, is not miscible with blood and therefore is the medium of choice.

Hysteroscopy is indicated in patients who have recurrent abnormal uterine bleeding. More than a third of these patients have a submucous myoma or endometrial polyp (or polyps) which may be missed even by the most thorough curettage. These may be resected or removed during hysteroscopy.

Hysteroscopy is indicated in women in whom an intrauterine device (IUD) is palpable within the cavity but cannot be removed and for those in whom the device cannot be felt but is shown (for example, by hysterosalpingogram) to be partially within the uterus.

The major application is in the diagnosis and treatment of intrauterine adhesions. Under direct visualization, the extent, density and location of the adhesions may be determined. Lysis of adhesions under direct vision is easy and safe, complete dissection is assured and normal endometrium is not traumatized. Following dissection of the adhesions, an IUD is placed and high dose estrogen therapy is used for two months.

Because endometrial carcinoma is considered both an indication (for accurate staging) and a